quantifying the said nucleic acid or the said nitrogenous base without marking by a mirage effect method.

17. (New) Mapping process for nitrogenous bases, nucleic acids, or nitrogenous bases of nucleic acids, fixed on a support, the said process consisting of mapping the said nucleic acids or the said nitrogenous bases without marking by a mirage effect method.

18. (New) Process for manufacturing a nucleic acid biochip formed particularly of a support on which at least one nucleic acid synthesized *in situ* is fixed, the said process comprising at least one synthesis and analysis cycle, particularly including firstly coupling of a nitrogenous base for in situ synthesis of the said nucleic acid fixed on the support, and secondly an analysis intended to check the coupling of the said nitrogenous base, the said analysis being done using a characterization process according to claim 15.

19. (New) Process for manufacturing a nucleic acid biochip formed particularly on a support on which at least one nucleic acid synthesized in situ is fixed, the said process comprising at least one synthesis and analysis cycle, particularly including firstly coupling of a nitrogenous base for in situ synthesis of the said nucleic acid fixed on the support, and secondly an analysis intended to check the coupling of the said nitrogenous base, the said analysis being done using a quantification process according to claim 16.

20. (New) Process for manufacturing a nucleic acid biochip formed particularly on a support on which at least one nucleic acid synthesized in situ is fixed, the said process comprising at least one synthesis and analysis cycle, particularly including firstly coupling of a nitrogenous base for in situ synthesis of the said nucleic acid fixed on the support, and secondly an analysis intended to check the coupling of the said nitrogenous base, the said analysis being done using a mapping process according to claim 17.

21. (New) Process according to claim 15, in which the mirage effect method is a photothermal deflection method.

22. (New) Process according to claim 16, in which the mirage effect method is a photothermal deflection method.

23. (New) Process according to claim 17, in which the mirage effect method is a photothermal deflection method.

24. (New) Process according to claim 18, in which the mirage effect method is a photothermal deflection method.

25. (New) Process according to claim 19, in which the mirage effect method is a photothermal deflection method.

26. (New) Process according to claim 20, in which the mirage effect method is a photothermal deflection method.

27. (New) Process according to claim 16, in which the nitrogenous base, the nucleic acid or the nitrogenous base of nucleic acid is illuminated by a pump beam originating from an excitation source, and absorption, deviation or reflection of light originating from the excitation source by nucleic acid, or by the nitrogenous base, is detected or measured using a probe beam and the image effect method is a photothermal deflection method.

28. (New) Process according to claim 27, in which the pump beam is coherent light.

29. (New) Process according to claim 28, in which the probe and pump beams intersect.

30. (New) Process according to claim 27, in which the probe and pump beams are in transverse or collinear configuration.

31. (New) Process according to claim 28, in which the probe and pump beams are in transverse or collinear configuration.

32. (New) Process according to claim 27, in which absorption is detected or measured in a spectral range between 200 and 300 nm.

32 33. (New) Process according to claim 28, in which the pump beam is chosen among an argon laser with a wave length of 275 nm, or a solid laser with a wave length of 266 nm.

33 34. (New) Process according to claim 27, in which the excitation source is an incoherent source.

34 35. (New) Process according to claim 15, in which the characterization, quantification, mapping or analysis is done in polarization of the nucleic acid(s) present on the support.

35 36. (New) Process according to claim 16, in which the characterization, quantification, mapping or analysis is done in polarization of the nucleic acid(s) present on the support.

36 37. (New) Process according to claim 17, in which the characterization, quantification, mapping or analysis is done in polarization of the nucleic acid(s) present on the support.

37 38. (New) Process according to claim 18, in which the characterization, quantification, mapping or analysis is done in polarization of the nucleic acid(s) present on the support.

38 39. (New) Process according to claim 16, in which the nitrogenous base, the nucleic acid or the nitrogenous base of nucleic acid is illuminated by a pump beam originating from an excitation source, and absorption, deviation or reflection of light originating from the excitation source by nucleic acid, or by the nitrogenous base, is detected or measured using a probe beam.

39 40. (New) Process according to claim 17, in which the nitrogenous base, the nucleic acid or the nitrogenous base of nucleic acid is illuminated by a pump beam originating from an excitation source, and absorption, deviation or reflection of light originating from the

excitation source by nucleic acid, or by the nitrogenous base, is detected or measured using a probe beam.

41. (New) Process according to claim 39, in which the pump beam is coherent light.

42. (New) Process according to claim 40, in which the pump beam is coherent light.

43. (New) Process according to claim 41, in which the probe and pump beams intersect.

44. (New) Process according to claim 42, in which the probe and pump beams intersect.

45. (New) Process according to claim 39, in which the probe and pump beams are in transverse or collinear configuration.

46. (New) Process according to claim 40, in which the probe and pump beams are in transverse or collinear configuration.

47. (New) Process according to claim 41, in which the probe and pump beams are in transverse or collinear configuration.

48. (New) Process according to claim 42, in which the probe and pump beams are in transverse or collinear configuration.

49. (New) Process according to claim 39, in which absorption is detected or measured in a spectral range between 200 and 300 nm.

50. (New) Process according to claim 40, in which absorption is detected or measured in a spectral range between 200 and 300 nm.

51. (New) Process according to claim 41, in which the pump beam is chosen among an argon laser with a wave length of 275 nm, or a solid laser with a wave length of 266 nm.

52. (New) Process according to claim 42, in which the pump beam is chosen among an argon laser with a wave length of 275 nm, or a solid laser with a wave length of 266 nm.

53. (New) Process according to claim 39, in which the excitation source is an incoherent source.

54. (New) Process according to claim 40, in which the excitation source is an incoherent source.

REMARKS

Claims 14-54 are active in the present application. Claims 14-54 are new claims. Support for the new claims is found in the original claims. No new matter is added. An action on the merits and allowance of claims is solicited.

Respectfully submitted,

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